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| APPLICATION NO. FILING DA | ATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------------------|-------------|----------------------|---------------------|------------------|--|
| 09/853,668 05/14/20 | 001 | Sung Jin Park | P-216 | 6826 | |
| 34610 7590 KED & ASSOCIATES, LLP | 02/26/2007 | EXAMINER | | | |
| 2325 DULLES CORNER BI | | KUMAR, SRILAKSHMI K | | | |
| SUITE 1100 HERNDON, VA 20171 | | | ART UNIT | PAPER NUMBER | |
| HERNDON, VA 20171 | | | 2629 | - | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | Application | Application No. Applicant(s) | | | | | |
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| Office Action Summary | | 09/853,668 | | PARK, SUNG JIN | | | | |
| | | Examiner | | Art Unit | | | | |
| | | | Srilakshmi K | | 2629 | | | |
| Period fo | The MAILING DATE of this communi or Reply | cation app | ears on the c | over sheet with the d | correspondence a | ddress | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAN IS IN 1997. THE MAN IS IN 1997 IN | AILING DA of 37 CFR 1.13 unication. tutory period w will, by statute, | ATE OF THIS 36(a). In no event vill apply and will e , cause the applica | S COMMUNICATION , however, may a reply be tin expire SIX (6) MONTHS from ation to become ABANDONE | N. nely filed the mailing date of this (ED (35 U.S.C. § 133) | • | | |
| Status | | | | | | | | |
| 1) 又 | Responsive to communication(s) filed | d on <i>06 Au</i> | iaust 2004 | - | | | | |
| 2a)□ | | | | n-final | • | | | |
| 3) | | this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| ٧,۵ | closed in accordance with the practic | | | | | e ments is | | |
| Dispositi | on of Claims | | | | | | | |
| 4)⊠ | Claim(s) 1-62 is/are pending in the ap | oplication. | | • | | | | |
| | • | - | | ideration | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. | | | | | | | |
| | Claim(s) <u>1-62</u> is/are rejected. | | | | | | | |
| | Claim(s) is/are objected to. | | • | , | | | | |
| | Claim(s) are subject to restrict | ion and/or | election rea | uirement | | | | |
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| | on Papers | | | | | | | |
| | The specification is objected to by the | | | • | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including | the correction | on is required | if the drawing(s) is ob | jected to. See 37 C | FR 1.121(d). | | |
| 11) 🗌 | The oath or declaration is objected to | by the Exa | aminer. Note | the attached Office | Action or form P | TO-152. | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | | | |
| | Acknowledgment is made of a claim fo ☐ All b)☐ Some * c)☐ None of: | or foreign _l | priority unde | r 35 U.S.C. § 119(a) |)-(d) or (f). | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| | application from the Internation | | | | | 9- | | |
| * S | ee the attached detailed Office action | | • | | d. | | | |
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| Attachment | (s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | | | |
| | e of Draftsperson's Patent Drawing Review (PT | O-948) | | Paper No(s)/Mail Da | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other: | | | | | | | | |
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DETAILED ACTION

The following office action is in response to the Petition Requesting Rejoinder and Consideration of Improperly Withdrawn Claims, filed on August 6, 2004. Claims 1-62 are pending in the application, of which 1-13, 19-23, 29-31, 38-42 and 48-49 were withdrawn from consideration. After further review, the request for reconsideration of the withdrawn claims and request for rejoinder has been granted. The following is an office action on the merits for pending claims 1-62.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-62 are rejected under 35 U.S.C. 101.

Claim 1 is directed to "a method for adjusting a brightness of a display screen of a system" which is directed to non-statutory subject matter as not being tangibly embodied in a manner so as to be executable as the method is directed to a software program as taught by the applicant in the specification on page 8, paragraph [28] where software may be provided to control system functions.

Claim 14 is directed to "a computer-readable medium having stored thereon "a sequence of instructions which, when executed by a processor, cause the processor to perform the steps of:" which is directed to non-statutory subject matter as not being tangibly embodied in a manner so as to be executable as the instructions are directed to a software program, and where the instructions are not disclosed to be computer executable instructions.

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Claim 31 is directed to "an apparatus comprising means for" which is directed to non-statutory subject matter as not being tangibly embodied in a manner so as to be executable as the means are directed to a software program as taught by the applicant in the specification on page 8, paragraph [28] where software may be provided to control system functions.

Claim 32 is directed to "an apparatus comprising means for" which is directed to non-statutory subject matter as not being tangibly embodied in a manner so as to be executable as the means are directed to a software program as taught by the applicant in the specification on page 8, paragraph [28] where software may be provided to control system functions.

According to the USPTO Interim Guidelines for Patent Subject Matter Eligibility, computer programs are neither computer components nor statutory processes, as they are not "acts" being performed nor do they define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Applicant is directed to pages 52-54 of the USPTO Interim Guidelines for Patent Subject Matter Eligibility for further information.

Claims 1-13, 15-30, 33-62 are further rejected under 35 USC 101 as they depend upon claims disclosing non-statutory subject matter.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 5, 11 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. Claims 5 and 11 recite the limitation "the <u>liquid crystal</u> display screen" in line 3 of claim 5 and line 2 of claim 11. There is insufficient antecedent basis for the limitation of "liquid crystal" in the claims. Appropriate correction is required.

6. Claim 49 recites the preamble of "The computer-readable medium of claim 33". Claim 33 does not recite a computer-readable medium, but recites "A method for adjusting a brightness of a display screen of a system, the method comprising:"

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62 are rejected under 35 U.S.C. 102(b) as being anticipated by Hetzler (US 5,954,820).

As to claim 1, Hetzler discloses a method for adjusting a brightness of a display screen of a system, the method comprising; determining whether there are user signal inputs (e.g., determining whether keystrokes is inputted or not); switching the system into an idle mode if there are no user signal inputs (backlight 13 is turned off when a user is not viewing the display); determining processor unit usage indicative of whether certain display related processes are running when in the idle mode; and adjusting the brightness of the display screen when in the idle mode based on processor unit usage (see column 3, lines 2-9 and column 5, lines 13-50 and column 8, lines 8-13).

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As to claim 13, Hetzler discloses a method for reducing electrical power consumed by a processor unit controlled display screen (column 2, lines 45-65), the method comprising; determining processor unit activity indicative of whether certain display related processes are running (column 3, lines 2-38); and dimming a brightness of the display screen when the processor unit activity falls below a minimum threshold (column 3, lines 2-38, Hetzler teaches where the current access frequency is compared to a previously calculated and continuously updated threshold frequency, where depending on the threshold different power saving modes are initiated).

As to claim 14, Hetzler discloses a computer readable medium having stored thereon a sequence of instructions which, when executed by a processor, cause the processor to perform the steps of monitoring a system to determine whether for a certain display related processes are running (e.g., determining whether keystrokes is inputted or not); see column 8, lines 8-13. Hetzler teaches a step of maintaining the brightness of the display if the certain display related processes are running (backlight is turned on when a user is viewing the display) and reducing the brightness of a display if the certain display related processes are not running (backlight 13 is turned off when a user is not viewing the display); see column 3, lines 2-9 and column 5, lines 13-50 and column 8, lines 8-13.

As to claim 31, this claim differs from claim 13 above only in that claim 31 is apparatus whereas claim 13 is method. Thus, apparatus claim 31 is analyzed as previously discussed with respect to method claim 13 above.

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As to claim 32, this claim differs from claim 14 and 33 above only in that claim 32 is apparatus whereas claims 14 and 33 are method. Thus, apparatus claim 32 is analyzed as previously discussed with respect to method claims 14 and 33 above.

As to claim 33, this claim differs from claim 14 only in that claim 33 deletes the limitation computer-readable medium recited in preamble of claim 14. Thus, claim 33 is analyzed as previously discussed with respect to claim 14 above since claim 33 is broader than claim 14.

As to claim 5, Hetzler teaches wherein determining processor unit usage comprises measuring a processor usage amount (current access frequency, column 3, lines 2-38), and reducing the brightness of the liquid crystal display screen if the processor usage amount is below a threshold value (column 3, lines 2-38, Hetzler teaches where the current access frequency is compared to a previously calculated and continuously updated threshold frequency, where depending on the threshold different power saving modes are initiated).

As to claim 6, Hetzler teaches wherein determining the processor unit usage comprises determining whether the display screen is displaying a movie (column 6, lines 17-64, whether a DVD is running).

As to claim 7, Hetzler teaches wherein determining whether the display screen is displaying a movie comprises determining whether a memory device connected to the processor unit is operating (column 6, lines 17-64, if a DVD is running).

As to claim 8, Hetzler teaches wherein the memory device comprises a hard disk (column 6, lines 17-64).

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As to claim 9, Hetzler teaches wherein the memory device comprises a CD-ROM (column 6, lines 17-64).

As to claim 10, Hetzler teaches wherein the memory device comprises a DVD (column 6, lines 17-64).

As to claim 11, Hetzler teaches wherein the brightness of the display screen is reduced if the display screen is not displaying a movie (column 8, lines 30-64, specifically lines 55-65 for movies).

As to claim 12, wherein the brightness of the display screen is maintained if the display screen is displaying a movie (column 8, lines 30-64, specifically lines 55-65 for movies).

As to claims 15 and 34, Hetzler clearly teaches system being a computer (portable computer 41).

As to claim 16, 35 and 50, Hetzler teaches wherein the display is a liquid crystal display screen (11).

As to claims 17 and 36, Hetzler clearly teaches monitoring for user input signal (i.e. keyboard activity); see column 3, lines 2-9.

As to claim 19, Hetzler teaches wherein the monitoring step comprises determining processor unit usage amount, and comparing said processor unit usage amount against a reference amount (column 3, lines 2-38).

As to claim 20, Hetzler teaches wherein the reference amount is controllably variable (column 3, lines 12-18, where the threshold frequency is variable).

As to claims 24 and 43, Hetzler teaches the monitoring step including determining whether a video process related device is in use; see column 6, lines 17-64.

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As to claims 25-26, 28 and 44-45, 47, Hetzler teaches the use DVD; see column 6, lines 17-18. It is known in the art that DVD could be either, a readable and writeable memory or a read only memory.

As to claims 27, 46, 55, 59, 61 Hetzler clearly teaches a CD-ROM; see column 6, lines 17-18.

As to claim 29, Hetzler teaches wherein the video process related device comprises a modem (17, column 4, lines 50-55).

As to claim 38, Hetzler teaches wherein monitoring the system for display related processes comprises determining a processor unit usage amount, and comparing said processor unit usage amount against a reference amount (column 3, lines 2-38).

As to claim 39, Hetzler teaches wherein the reference amount is controllably variable (column 3, lines 12-18, where the threshold frequency is variable).

As to claim 48, Hetzler teaches wherein the video process related device comprises a modem (17, column 4, lines 50-55).

As to claims 51, 53, 55, 57 and 59, Hetzler teaches wherein the display related processes include at least one of playing a CD-ROM; a DVD, a MPEG file, or video file (column 6, lines 17-64).

As to claims 52, 54, 56, 58, 60 and 62, Hetzler teaches wherein the display related processes do not include user inputs via a mouse or keyboard (column 8, lines 8-13).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 18 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler as applied to claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62, and further in view of Zenda (US 5,386,577).

As to claims 18 and 37, note the discussion of Hetzler above, Hetzler does not mention the step of determining whether the system is powered by an internal power source. Zenda teaches that" in response to the low battery state, a luminance control signal having a minimum luminance value is supplied to the flat panel display. When the personal computer is driven by the AC adapter, a luminance control signal having a maximum luminance value is supplied to the flat panel display"; see column 6, line 36 through column 7, line 6. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the step detecting the system being powered by an internal source (battery) to the power control of Hetzler so as to avoid the battery operation time being shortened more than necessary (see column 3, lines 35-45).

11. Claims 2, 3, 21, 22, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler as applied to Claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62, above and further, in view of McFedries (Windows ® 98 Unleashed, May 12, 1998).

As to claims 2, 21 and 40, Hetzler teaches determining processor unit usage amount (column 3, lines 2-38). Hetzler does not teach where the determining information is contained in a registry. McFedries teaches operating system Windows® 98. On page 14, McFedries teaches

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HKEY_DYN_DATA key, and where the registry files are updated when you shut down the operating system, restart the operating system and at regular intervals when running the operating system. The determining information for the processor usage is contained in this registry as shown by McFedries on page 14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the processor unit usage amount determining information is contained in a registry as taught by McFedries into that of Hetzler, as Hetzler is a computer system which uses an operating system, such as Windows® 98.

As to claims 3, 22 and 41, McFedries teaches wherein the registry comprises HKEY DYN_DATA\PerfStats\StatData (Page 14, Fig. 12.10).

12. Claims 4, 23, 30, 42 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler as applied to claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62, above, and further in view of Kardach (US 6,018,803).

As to claims 4, 23 and 42, Hetzler does not teach wherein the monitoring step comprises determining whether a video process related keyword is contained in the currently operating process.

Kardach teach a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process related keyword is contained in the currently operating process (column 7, lines 1-19, where the bus utilization activity circuit determines whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer system of Hetzler as once the bus utilization activity circuit

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detects a keyword determining a movie is currently operating, it prevents the screensaver from activating.

As to claims 30 and 49, Hetzler teaches wherein the monitoring step comprises; determining processor unit usage amount and comparing said processor unit usage amount against a reference amount (column 3, lines 12-18, where the threshold frequency is variable). Hetzler does not teach wherein the monitoring step comprises determining whether a video process related keyword is contained in the currently operating process.

Kardach teach a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process related keyword is contained in the currently operating process (column 7, lines 1-19, where the bus utilization activity circuit determines whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer system of Hetzler as once the bus utilization activity circuit detects a keyword determining a movie is currently operating, it prevents the screensaver from activating.

Response to Arguments

13. Applicant's arguments, see Petition for Rejoinder, filed August 6, 2004, with respect to the restriction(s) of claim(s) 1-13, 19-23, 29-31, 38-42, 48-54, 57 and 58 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hetzler, Zenda, McFedries and Kardach.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 571 272 7769. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SKK February 1, 2007

> SUMMI LEFKOVNIZ BUNDANIA KANDANIA